IN THE CLAIMS

1. (previously presented) A method for the evaluation of a biological sample based on the amounts of biogenic amines, which comprises:

carrying out on said sample an ion mobility measurement;

determining the amounts of said biogenic amines contained in said sample by the appearance of ions derived from said amines in said ion mobility measurement;

deriving from said amounts a number of measured parameters related to desired information;

providing, for each information desired, an input consisting of the identification of said information;

comparing said input to said measured parameters; and

deriving from said comparison a response.

2. (previously presented) The method according to claim 1, wherein the measured parameters are derived from the amounts of the biogenic amines according to a program stored in memory.

3. (canceled)

4. (previously presented) The method according to claim 1, further comprising storing a program that associates a diagnostic response to results of the comparison of the input consisting of the identification of diagnostic information to the measured parameter, for each of the expected diagnostic operations.

5. (previously presented) The method according to claim 1, wherein the sample is of vaginal fluid and the biogenic amine, the amount of which is determined, is trimethylamine.

6. (previously presented) The method according to claim 5, comprising measuring the number of ions of different amines, and if the ions of trimethylamine are present in a number of 40% or more of the total number of all amine ions,

recognizing the presence of bacterial vaginosis, while if they are present in a number of 20% or less, recognizing the absence of bacterial vaginosis.

7. (previously presented) The method according to claim 5, further comprising measuring the amounts of putrescine and cadaverine, and if they are abnormally high suspecting various pathological conditions.

8. (currently amended) The method according to claim 5, comprising the steps of ionizing vapors emanating from the sample_and measuring the presence of volatile amine compounds by the appearance of ions derived from said compounds in the ion mobility measurement.

9. (previously presented) The method according to claim 8, further comprising enhancing the emanation of amine vapors by adding reagents that transform the amine compounds to more volatile forms.

10. (previously presented) The method according to claim 9, wherein the addition reagents are chosen from among alkaline solutions or ammonia.

11-20. (canceled)

21. (previously presented) The method according to claim 1, wherein the evaluation is a diagnostic evaluation, the sample is derived from a human, the desired information comprises diagnostic information and the response is a diagnostic response.